Landscape Hydrology

Course SC0413

http://richardsonsoils.com/events/

Date August 21, 2019

- Location Austin Carey Memorial Forest Learning Center University of Florida, IFAS School of Forest Resources & Conservation <u>http://sfrc.ufl.edu/forestcampus/</u>
- Instructor Travis Richardson, MS, CPSS T.Richardson Soils and Environmental <u>Travis@RichardsonSoils.com</u> Provider Number SP0020
- About The primary focus of this course will be to provide participants hands on experience determining the seasonal high water table based on soil morphology. Landscape position is generally the primary driver of hydrology at the local scale. Landscape position is a result of geologic formations and prior climatic conditions. Developing a general understanding of geologic formations and the resulting landscapes enables a broader understanding of water movement across and through the landscape. Understanding landscapes and water movement is critical for numerous structural, public health, and environmental applications. Onsite sewage treatment and disposal systems and stormwater systems rely on accurate identification of groundwater saturation to provide the appropriate level of treatment prior to reaching the groundwater. Because the water table can fluctuate many feet, the goal is to identify where saturation and anaerobic conditions occur during normal wet season conditions. This is achieved through identification of soil morphologies that result from repeated saturation and drying.
- **CEUs** Florida Registered and Master septic tank contractors are awarded 8.0 contact hours for this training. Individuals certified under s. 381.0101, *FS* are awarded 9.0 contact hours for this training.

Landscape Hydrology

Provider Number SP0020 Travis Richardson T.Richardson Soils and Environmental 9158 NE 76th Ct Gainesville, FL 32609

Agenda March 21, 2018

- 07:30-08:00 Registration UF Austin Carey Memorial Forest (ACMF) Learning Center
- 08:00-08:45 Geology, Landforms, and Water Movement
- 08:45-09:15 Soil Survey
- 09:15-09:45 General Soils
- 09:45-10:00 Break
- 10:00-11:00 Development of Soil Morphology
- 11:00-12:00 Interpretation of Soil Morphology
- 12:00-12:45 Lunch provided onsite
- 12:45-16:45 Field exercises onsite at ACMF
- 16:45-17:00 Review of field exercises and summary
- 17:00-17:10 Break
- 17:10-17:30 Exam (Required for Master septic tank contractor CEUs)

Instructor Credentials

Travis Richardson, MS, CPSS T.Richardson Soils and Environmental

Travis Richardson is a Certified Professional Soil Scientist (CPSS) and holds a MS in Soil and Water Science from the University of Florida. From 2002 to 2017, Richardson was employed with St. Johns River Water Management District and progressed from an Environmental Scientist II (5 yrs), to a Soil Scientist (7 yrs), to a Technical Program Manager (3 yrs). In all of these roles Richardson utilized his education in Soil and Water Science to classify soils, identify hydric soils, identify the seasonal high water table, and understand water movement across the landscape. During this time, Richardson, provided guest lectures for multiple courses at the University of Florida focusing on soil formation, hydric soils, and wetland delineation: Soil, Water, and Land Use (SOS 4231C), Hydric Soils (SWS 5247), Environmental Law, and Environmental Science Lab (EVS3000L). Richardson also provided annual hydric soil and wetland delineation trainings for Water Management District staff. In addition, Richardson has multiple publications relating soil morphology to specific hydrologic conditions. Richardson has been recognized as an expert soil scientist and provided expert testimony in three hearings.

In February of 2017 Richardson started his own consulting firm T.Richardson Soils and Environmental. He focuses on soil evaluations for onsite sewage and treatment systems, wetland delineation, site feasibility studies, environmental permitting, and expert testimony.

Austin Cary Memorial Forest

Location: 10625 NE Waldo Rd. Gainesville, FL 32609

From I-75 Southbound: Take Exit 390 (FL-222/NW 39th Ave) East (almost 10 miles) to Waldo Road. Turn left (North); approximately 6 miles later, you'll see a sign on the right-hand side indicating the Austin Cary Forest.

From I-75 Northbound: Take Exit 382 for FL-121/FL-331/Williston Road and turn left (North). Travel for 14.5 miles (approximately 20 minutes). Austin Cary Forest is on your right.

From I-10: Take Exit 343 (US 301) south. Continue south for approximately 36 miles through the cities of Starke and Waldo. At the exit for Gainesville, bear right onto FL-24/SW 4th Blvd/NE State Rd 24 Westbound and continue for 4 miles. Turn left at Austin Cary Forest.

There is a stone wall and a gate at the entrance to the Austin Cary Forest. Head straight through the gate and past the buildings and vehicles to Loop Road. Follow it around for about 1.5 miles, noting the signs to turn right

